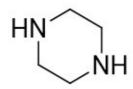


Piperazine Anhydrous (PIP-ANH)

Piperazine



Piperazine is a cyclic ethylene amine with two secondary amine groups. Piperazine is supplied as (anhydrous) Piperazine 99%. Piperazine is commonly used as a raw material for several commercially available drugs. Other application fields include polyamides, gas sweetening and as an intermediate in PU catalysts.

CAS number 110-85-0 EINECS/ELINCS No. 203-808-3

Molecular weight 86.1

 $\begin{array}{l} \text{Molecular formula} \\ C_4 H_{10} N_2 \end{array}$

Specifications

Appearance (MOA 200)	White flakes
Piperazine (MOA 526)	≥ 99.7 wt%
Color (MOA 201)	≤ 50 Hazen
Water (MOA 305)	≤ 1.0 wt%

Characteristics

F	MICS follow
Form	White flakes
Odor	Amine like
Flammability, liquids	The substance or mixture is a flammable solid with the category $\boldsymbol{1}$
Water solubility	150 g/l, 20°C
pH, 15% solution	12
Melting point/freezing point, 1013 hPa	106 °C
Boiling point/boiling range, 1013 hPa	147 °C
Ignition temperature	320 °C
Vapor pressure, 22.5 °C	0.4 hPa
Relative vapor density, air = 1.0	3.0
Density, 20°C	1110 kg/m³
Relative density, 20°C	1.1
Partition coefficient, N-octanol/water, 25°C, log Pow	-1.24
Dynamic viscosity, 110°C	0.96 mPa.s

Notes:

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nouryon does not accept any liability whatsoever arising out of the use of or reliance on this information, or out of the use or the performance of the product. Nothing contained herein shall be construed as granting or extending any license under any patent. Customer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued information on the subject matter covered. The customer may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. Don't copy this document to a website.

For more information, please visit our website at www.nouryon.com.

